

<110> Owens, S. Michael.
Lacy, H. Marie

<120> Mouse/Human Chimeric Anti-Phencyclidine
Antibody And Uses Thereof

<130> D6508

<141> 2004-04-21

<150> USSN 60/464,190

<151> 2003-04-21

<160> 18

<210> 1

<211> 39

<212> DNA

<213> artificial sequence

<220>

<221> primer_bind

<222> 18, 22, 28, 31, 34

<223> 5' primer with a *EcoRV* site used to amplify
leader region of murine IgG1; r=a/g, s=c/g,
k=t/g, m=c/a.

<400> 1

ggggatatcc accatggrat gsagctgkgt matsctctt 39

<210> 2
<211> 39
<212> DNA
<213> artificial sequence

<220>
<221> primer_bind
<222> 17, 26, 33
<223> 5' primer with a *EcoRV* site used to
amplify the leader region of murine
IgG1; r=a/g, y=t/c, k=t/g.

<400> 2
ggggatatcc accatgract tcgggytgag ctkggttt 39

<210> 3
<211> 38
<212> DNA
<213> artificial sequence

<220>
<221> primer_bind
<223> 5' primer with a *EcoRV* site used to
amplify the leader region of murine IgG1.

<400> 3

ggggatatcc accatggctg tcttggggct gctcttct 38

<210> 4
<211> 38
<212> DNA
<213> artificial sequence

<220>
<221> primer_bind
<223> 5' primer with a *EcoRV* site used to
amplify the leader region of murine
kappa chain.

<400> 4

ggggatatcc accatggaga cagacacact cctgctat 38

<210> 5
<211> 39
<212> DNA
<213> artificial sequence

<220>
<221> primer_bind
<223> 5' primer with a *EcoRV* site used to
amplify the leader region of murine
kappa chain.

<400> 5
ggggatatcc accatggatt ttcaggtgca gatttcag 39

<210> 6
<211> 40
<212> DNA
<213> artificial sequence

<220>
<221> primer_bind
<222> 17, 25, 28, 37, 38
<223> 5' primer with a *EcoRV* site used to amplify the leader region of murine kappa chain, r=g/a, k=g/t, y=t/c.

<400> 6
ggggatatcc accatgragt cacakacyca ggtcttyrta 40

<210> 7
<211> 40
<212> DNA
<213> artificial sequence

<220>
<221> primer_bind
<222> 20, 25, 32, 34, 37, 40
<223> 5' primer with a *EcoRV* site used to amplify the leader region of murine kappa chain; k=g/t, w=a/t, y=t/c, r=g/a.

<400> 7
ggggatatcc accatgaggk cccwgctca gytyctkggr 40

<210> 8
<211> 37
<212> DNA
<213> artificial sequence

<220>
<221> primer_bind
<223> 5' primer with a *EcoRV* site used to amplify
the leader region of murine kappa chain.

<400> 8
ggggatatcc accatgaagt tgcctgttag gctgttg 37

<210> 9
<211> 37
<212> DNA
<213> artificial sequence

<220>
<221> primer_bind
<223> 5' primer with a *NheI* site used to amplify
the V_L region of mAb6B5.

<400> 9
cccgctagcc accatgaagt tgcctgttag gctgttg 37

<210> 10
<211> 31
<212> DNA
<213> artificial sequence

<220>
<221> primer_bind
<223> 3' primer with a NotI site used to amplify
the V_L region of mAb6B5.

<400> 10
tatacgccgc gcagttttta tttccagctt g 31

<210> 11
<211> 39
<212> DNA
<213> artificial sequence

<220>
<221> primer_bind
<223> 5' primer generated from primer with SEQ ID NO.1
and used to amplify V_H of mAb6B5; r=a (*18),
s=c (*22) and g (*34), k=t (*28), m=a (*31)
* position in the primer sequence.

<400> 11
ggggatatcc accatggaaat gcagctgtgt aatgctctt 39

<210> 12
<211> 31
<212> DNA
<213> artificial sequence

<220>
<221> primer_bind
<223> 3' primer with a *NheI* site used to amplify
the V_H region of mAb6B5.

<400> 12
ggggctagct gaggagactg tgagagtgg t 31

<210> 13
<211> 39
<212> DNA
<213> artificial sequence

<220>
<221> primer_bind
<223> 5' primer used to amplify ch-mAb6B5, where
the sequence is similar to primer with SEQ ID
No. 11, except the *EcoRV* site is replaced by
NheI site.

<400> 13
ggggctagcc accatggaat gcagctgtgt aatgcttt 39

<210> 14
<211> 31
<212> DNA
<213> artificial sequence

<220>
<221> primer_bind
<223> 3' primer with a *XhoI* site used to
amplify ch-mAb6B5.

<400> 14
gggctcgagt catttacccg gagacaggga g 31

<210> 15
<211> 714
<212> DNA
<213> anti-PCP ch-mAb6B5 light chain

<220>
<223> Nucleotide sequence of anti-PCP
ch-mAb6B5 light chain.

<400> 15
atgaagttgc ctgttaggct gttgggtgctg atgttctgga ttcctgcttc 50
cagcagtgtat gttttgatga cccaaactcc actctccctg cctgtcagtc 100
ttggagatca agcctccatc tcttgcagat ctagtcagac cattgtacat 150
agtaatggaa acacaccttta agaatggta ctcgcagaaac caggccagtc 200
tccaaagctc ctgatctaca aagtttccaa ccgattttct ggggtcccag 250
acaggttcag tggcagtggta tcagggacag atttcacact caagatcagc 300

agagtggagg ctgaggatct gggagtttat tactgcttcc aaggcacaca 350
tgctccgtac acgttcggag gggggaccaa gctggaaata aaaactgcgg 400
ccgcaccatc tgtcttcatc ttcccgccat ctgatgagca gttgaaatct 450
ggaactgcct ctgttgtgtg cctgctgaat aacttctatc ccagagaggc 500
caaagtacag tggaaggtgg ataacgcctt ccaatcggtt aactcccagg 550
agagtgtcac agagcaggac agcaaggaca gcacctacag cctcagcagc 600
accctgacgc tgagcaaagc agactacgag aaacacaaag tctacgcctg 650
cgaagtacc catcagggcc tgagctcgcc cgtcacaaag agcttcaaca 700
ggggagagtg ttga 714

<210> 16

<211> 237

<212> PRT

<213> anti-PCP ch-mAb6B5 light chain

<220>

<223> Amino acid sequence of anti-PCP
ch-mAb6B5 light chain.

<400> 16

| | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Lys | Leu | Pro | Val | Arg | Leu | Leu | Val | Leu | Met | Phe | Trp | Ile | Pro |
| | | | | | | | | | | 5 | | 10 | | 15 |
| Ala | Ser | Ser | Ser | Asp | Val | Leu | Met | Thr | Gln | Thr | Pro | Leu | Ser | Leu |
| | | | | | | | | | | 20 | | 25 | | 30 |
| Pro | Val | Ser | Leu | Gly | Asp | Gln | Ala | Ser | Ile | Ser | Cys | Arg | Ser | Ser |
| | | | | | | | | | 35 | | 40 | | 45 | |
| Gln | Thr | Ile | Val | His | Ser | Asn | Gly | Asn | Thr | Tyr | Leu | Glu | Trp | Tyr |
| | | | | | | | | | 50 | | 55 | | 60 | |
| Leu | Gln | Lys | Pro | Gly | Gln | Ser | Pro | Lys | Leu | Leu | Ile | Tyr | Lys | Val |
| | | | | | | | | | 65 | | 70 | | 75 | |
| Ser | Asn | Arg | Phe | Ser | Gly | Val | Pro | Asp | Arg | Phe | Ser | Gly | Ser | Gly |
| | | | | | | | | | 80 | | 85 | | 90 | |
| Ser | Gly | Thr | Asp | Phe | Thr | Leu | Lys | Ile | Ser | Arg | Val | Glu | Ala | Glu |
| | | | | | | | | | 95 | | 100 | | 105 | |

Asp Leu Gly Val Tyr Tyr Cys Phe Gln Gly Thr His Ala Pro Tyr
110 115 120
Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Thr Ala Ala Ala
125 130 135
Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser
140 145 150
Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg
155 160 165
Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly
170 175 180
Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr
185 190 195
Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu
200 205 210
Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser
215 220 225
Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
230 235

<210> 17

<211> 1389

<212> DNA

<213> anti-PCP ch-mAb6B5 heavy chain

<220>

<223> Nucleotide sequence of anti-PCP
ch-mAb6B5 heavy chain.

<400> 17

atggaatgca gctgtgtaat gctttcctc ctgtcaggaa ctgcagggtgt 50
cctctctgag gtccagctgc aacagtctgg acctgagttg gtgaagcctg 100
gggcttcagt gaagatgtcc tgcaaggctt ctggctacac tttcactgac 150
tactacatac actggatgaa gcagagccat ggaaagagcc ttgagtgat 200
tggatataatt tatcctaaca acggtggtaa tggctacaac cagaagttca 250
agggcaaggc cacattgact gtagacaagt cctccagcac agcctacatg 300

| | | | | | |
|------------|------------|------------|------------|------------|------|
| gagctccgca | ccctgacatc | tgaggactct | gcagtctatt | actgtggaa | 350 |
| atctacctgg | gacgactttg | actactgggg | ccaaggcacc | actctcacag | 400 |
| tctcctcagc | tagcaccaag | ggcccatcg | tcttccccct | ggcgccctgc | 450 |
| tccaggagca | cctccgagag | cacagcggcc | ctgggctg | tggtcaagga | 500 |
| ctactcccc | gaaccggta | cggtgtcgt | gaactcaggc | gctctgacca | 550 |
| gcggcgtgca | caccttcca | gctgtcctac | agtcc | actctactcc | 600 |
| ctcagcagcg | tggtgaccgt | gccctccagc | aacttcggca | cccagaccta | 650 |
| cacctgcaac | gtagatcaca | agcccagcaa | caccaagg | gacaagacag | 700 |
| ttgagcgcaa | atgttgtgtc | gagtgc | cg | accac | 750 |
| gcaggaccgt | cagtctcct | cttccccca | aaacccaa | acacc | 800 |
| gatctcccg | accctgagg | tcacgtcg | ggtgg | gtgagcc | 850 |
| aagaccccga | ggtccagttc | aactggtacg | tggacggcgt | ggaggtgc | 900 |
| aatgccaaga | caaagccacg | ggaggagcag | ttcaacagca | cgttccgt | 950 |
| ggtcagcgtc | ctcaccgtt | tgcaccagga | ctggctga | ggcaagg | 1000 |
| acaagtgcaa | ggtctccaac | aaaggcctcc | cagccccat | cgaaaaacc | 1050 |
| atctccaaaa | ccaaagggca | gccccgagaa | ccacagg | acacc | 1100 |
| cccatccccg | gaggagatga | ccaagaacca | ggtcagc | ctgg | 1150 |
| tcaaaggctt | ctatcccagc | gacatcgcc | tggagtgg | gagcaatgg | 1200 |
| cagccggaga | acaactacaa | gaccacac | ccc | actccgac | 1250 |
| ctccttcttc | ctctacagca | agtcaccgt | ggacaagagc | aggtggc | 1300 |
| aggggaacgt | cttctcatgc | tccgtgatgc | atgaggct | gcacaaccac | 1350 |
| tacacgcaga | agagcctctc | cctgtctcc | gt | taat | 1389 |

<210> 18
<211> 462
<212> PRT
<213> anti-PCP ch-mAb6B5 heavy chain

<220>
<223> Amino acid sequence of anti-PCP
ch-mAb6B5 heavy chain.

<400> 18
Met Glu Cys Ser Cys Val Met Leu Phe Leu Leu Ser Gly Thr Ala
5 10 15

| | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Val | Leu | Ser | Glu | Val | Gln | Leu | Gln | Gln | Ser | Gly | Pro | Glu | Leu |
| | | | | | 20 | | | | | 25 | | | | 30 |
| Val | Lys | Pro | Gly | Ala | Ser | Val | Lys | Met | Ser | Cys | Lys | Ala | Ser | Gly |
| | | | | | 35 | | | | 40 | | | | 45 | |
| Tyr | Thr | Gly | Thr | Asp | Tyr | Tyr | Ile | His | Trp | Met | Lys | Gln | Ser | His |
| | | | | | 50 | | | | 55 | | | | 60 | |
| Gly | Lys | Ser | Leu | Glu | Trp | Ile | Gly | Tyr | Ile | Tyr | Pro | Asn | Asn | Gly |
| | | | | 65 | | | | | 70 | | | | 75 | |
| Gly | Asn | Gly | Tyr | Asn | Gln | Lys | Phe | Lys | Gly | Lys | Ala | Thr | Leu | Thr |
| | | | | 80 | | | | 85 | | | | 90 | | |
| Val | Asp | Lys | Ser | Ser | Ser | Thr | Ala | Tyr | Met | Glu | Leu | Arg | Thr | Leu |
| | | | | 95 | | | | | 100 | | | 105 | | |
| Thr | Ser | Glu | Asp | Ser | Ala | Val | Tyr | Tyr | Cys | Gly | Arg | Ser | Thr | Trp |
| | | | | 110 | | | | 115 | | | | 120 | | |
| Asp | Asp | Phe | Asp | Tyr | Trp | Gly | Gln | Gly | Thr | Thr | Leu | Thr | Val | Ser |
| | | | | 125 | | | | 130 | | | | 135 | | |
| Ser | Ala | Ser | Thr | Lys | Gly | Pro | Ser | Val | Phe | Pro | Leu | Ala | Pro | Cys |
| | | | | 140 | | | | 145 | | | | 150 | | |
| Ser | Arg | Ser | Thr | Ser | Glu | Ser | Thr | Ala | Ala | Leu | Gly | Cys | Leu | Val |
| | | | | 155 | | | | 160 | | | | 165 | | |
| Lys | Asp | Tyr | Phe | Pro | Glu | Pro | Val | Thr | Val | Ser | Trp | Asn | Ser | Gly |
| | | | | 170 | | | | 175 | | | | 180 | | |
| Ala | Leu | Thr | Ser | Gly | Val | His | Thr | Phe | Pro | Ala | Val | Leu | Gln | Ser |
| | | | | 185 | | | | 190 | | | | 195 | | |
| Ser | Gly | Leu | Tyr | Ser | Leu | Ser | Ser | Val | Val | Thr | Val | Pro | Ser | Ser |
| | | | | 200 | | | | 205 | | | | 210 | | |
| Asn | Phe | Gly | Thr | Gln | Thr | Tyr | Thr | Cys | Asn | Val | Asp | His | Lys | Pro |
| | | | | 215 | | | | 220 | | | | 225 | | |
| Ser | Asn | Thr | Lys | Val | Asp | Lys | Thr | Val | Glu | Arg | Lys | Cys | Cys | Val |
| | | | | 230 | | | | 235 | | | | 240 | | |
| Glu | Cys | Pro | Pro | Cys | Pro | Ala | Pro | Pro | Val | Ala | Gly | Pro | Ser | Val |
| | | | | 245 | | | | 250 | | | | 255 | | |
| Phe | Leu | Phe | Pro | Pro | Lys | Pro | Lys | Asp | Thr | Leu | Met | Ile | Ser | Arg |
| | | | | 260 | | | | 265 | | | | 270 | | |
| Thr | Pro | Glu | Val | Thr | Cys | Val | Val | Val | Asp | Val | Ser | His | Glu | Asp |
| | | | | 275 | | | | 280 | | | | 285 | | |
| Pro | Glu | Val | Gln | Phe | Asn | Trp | Tyr | Val | Asp | Gly | Val | Glu | Val | His |
| | | | | 290 | | | | 295 | | | | 300 | | |
| Asn | Ala | Lys | Thr | Lys | Pro | Arg | Glu | Glu | Gln | Phe | Asn | Ser | Thr | Phe |
| | | | | 305 | | | | 310 | | | | 315 | | |

Arg Val Val Ser Val Leu Thr Val Val His Gln Asp Trp Leu Asn
320 325 330
Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Gly Leu Pro Ala
335 340 345
Pro Ile Glu Lys Thr Ile Ser Lys Thr Lys Gly Gln Pro Arg Glu
350 355 360
Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys
365 370 375
Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser
380 385 390
Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn
395 400 405
Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp Gly Ser Phe Phe
410 415 420
Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly
425 430 435
Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
440 445 450
Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
455 460